

## ABSTRACT

A measuring device (e.g., a vectorial network analyser) by means of at least two ports can be connected to a device under test and has associated excitation/receiving units (ERUs),  
5 each thereof having one port. At least one ERU has a signal generator, which can apply an excitation signal onto a device under test. Each ERU possesses two receiving apparatuses (each with a mixer in connection with an oscillator signal) to receive the excitation signal, the reflected signal from the associated port or the signal transmitted to the associated port and converts said signal into an intermediate signal. Each ERU exhibits its own oscillator  
10 separate from the signal generator, and generates the oscillator signal for the mixer of the receiving apparatus of the ERU, whereby the frequency and/or phase of the oscillator signals, can be adjusted independently of the frequency and/or phase of oscillator signals of the oscillators of other ERUs.